

Table 3. Summary of Residential Air Sampling (Indoor, Sub-Slab and Ambient Air) analytical Results
Grenada Manufacturing Facility, Grenada, MS

DRAFT

Sample Details			Constituent ($\mu\text{g}/\text{m}^3$)															
Sample ID	Sample Type	Sample Date	Benzene	Chloroform	1,2-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	Ethylbenzene	Methylene chloride	PCE	Toluene	1,1,2-TCA	TCE	1,2,4-TMB	Vinyl chloride	m,p-Xylenes	o-Xylenes
Indoor Air / Ambient Air Screening Level *			0.36	0.12	0.11	210	NL	NL	1.1	100	11	5200	0.18	0.48	7.3	0.17	100	100
Sub-Slab Vapor Screening Level *			12	4.1	3.6	7000	NL	NL	37	3400	360	170000	58	16	240	5.6	3500	3500
1-IA	Indoor Air	9/23/2015	3.8	0.75	0.84	< 0.18	0.61	< 1.8	1.0	< 3.2	< 0.62	5.4	< 0.50	1.1	< 2.2 UJ	< 0.12	2.6	0.95
1-SS	Sub-Slab Vapor	9/23/2015	< 3.9 [3.8]	< 6.0 [5.7]	< 4.9 [4.8]	< 4.8 [4.6]	< 4.8 [4.6]	< 4.8 [4.6]	< 5.3 [5.1]	< 42 [41]	8.5 [8.0]	< 4.6 [4.4]	< 6.6 [6.4]	< 6.6 [22]	< 6.0 [5.8]	< 3.1 [3.0]	< 5.3 [5.1]	< 5.3 [5.1]
2-IA	Indoor Air	9/23/2015	0.81	0.91	7.0	< 0.17	0.57	< 1.7	0.85	< 3.0	< 0.59	7.9	< 0.48	1.1	< 2.0 UJ	< 0.11	1.9	1.1
2-SS	Sub-Slab Vapor	9/23/2015	< 3.7	< 5.7	< 4.7	< 4.6	< 4.6	< 4.6	< 5.1	< 41	< 7.9	6.9	< 6.4	< 6.3	< 5.8	< 3.0	< 5.1	< 5.1
3-IA	Indoor Air	9/23/2015	< 2.8	4.2	< 1.4	< 0.69	< 1.4	< 6.9	< 1.5	< 12	< 2.4	5.6	< 1.9	< 1.9	< 8.6 UJ	< 0.45	< 3.0	< 1.5
3-SS	Sub-Slab Vapor	9/23/2015	< 3.6	< 5.6	< 4.6	< 4.5	< 4.5	12	< 4.9	< 40	< 7.7	< 4.3	< 6.2	< 6.1	< 5.6	< 2.9	< 5.0	< 5.0
4-IA	Indoor Air	9/23/2015	1.8	0.94	1.2	< 0.071	0.58	< 0.71	0.43	< 1.2	< 0.24	2.7	< 0.20	0.99	< 0.88 UJ	0.079	1.1	0.56
4-SS	Sub-Slab Vapor	9/23/2015	< 3.7	< 5.7	< 4.7	< 4.6	< 4.6	< 4.6	< 5.0	< 40	7.9	< 4.4	< 6.4	< 6.3	< 5.7	< 3.0	< 5.0	< 5.0
5-IA	Indoor Air	9/23/2015	0.86	0.21	0.18	< 0.076	0.65	< 0.76	0.55	2.0	< 0.26	2.6	< 0.21	0.86	< 0.94 UJ	0.062	1.6	0.56
5-SS	Sub-Slab Vapor	9/23/2015	< 3.8	< 5.8	< 4.8	< 4.7	< 4.7	< 4.7	< 5.2	< 41	< 8.1	< 4.5	< 6.5	< 6.4	6.6	< 3.0	< 5.2	< 5.2
6-IA	Indoor Air	9/23/2015	< 0.70	0.56	< 0.35	< 0.17	0.38	< 1.7	0.63	< 3.0	< 0.59	3.9	< 0.48	0.65	< 2.2 UJ	< 0.11	2.1	1.0
6-SS	Sub-Slab Vapor	9/23/2015	< 3.7	140	< 4.7	< 4.6	< 4.6	< 4.6	< 5.1	< 41	< 7.9	4.7	< 6.4	< 6.3	< 5.8	< 3.0	< 5.1	< 5.1
1-AA	Ambient Air	9/23/2015	0.30 J	< 0.19	< 0.15	< 0.076	0.85	< 0.76	< 0.16	< 1.3	< 0.26	0.66	< 0.21	1.2	< 0.94 UJ	0.10	0.52	0.29
2-AA	Ambient Air	9/23/2015	0.32	< 0.18	< 0.15	< 0.072	0.67	< 0.72	0.24	< 1.3	< 0.25	0.89	< 0.20	1.0	< 0.90 UJ	0.046 J	0.83	0.36

Notes:

USEPA VISL Calculator Version 3.4, June 2015 RSLs used to calculate target residential screening levels for indoor air, ambient air, and sub-slab vapor concentrations based on the lower of either a target cancer risk of 1E-06 or a **target hazard index of 1.0**. Screening levels assumes 26 year exposure duration, 350 days per year, 24 hours per day.

[] Duplicate sample

BOLD SHADED Bold and shaded values exceed the applicable screening level based on the lower of either a target cancer risk of 1E-06 or a target hazard index of 1.0.

$\mu\text{g}/\text{m}^3$ micrograms per cubic meter

DCA Dichloroethane

DCE Dichloroethene

J The compound was positively identified; however, the associated numerical value is an estimated concentration only.

NL Screening level not calculated due to no toxicity data

PCE Tetrachloroethene

RSL Regional Screening Level

TCA Trichloroethane

TCE Trichloroethene

TMB Trimethylbenzene

UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.

USEPA United States Environmental Protection Agency

VISL Vapor Intrusion Screening Level

Table 1. Summary of Vapor Intrusion Screening Levels for Indoor Air, Sub-Slab Vapor, Exterior Soil Gas and Groundwater Grenada, MS

Constituent	Indoor Air / Ambient Air ($\mu\text{g}/\text{m}^3$)†	Sub-Slab Vapor / Exterior Soil Gas ($\mu\text{g}/\text{m}^3$)†	Groundwater ($\mu\text{g}/\text{L}$)*
Benzene	0.36	12	2
Chloroform	0.12	4.1	1
Dichloroethane, 1,2-	0.11	3.6	2.9
Dichloroethene, 1,1-	210	7000	230
Dichloroethene, cis-1,2-	NL	NL	NL
Dichloroethene, trans-1,2-	NL	NL	NL
Ethylbenzene	1.1	37	4.7
Methylene chloride	100	3400	930
Tetrachloroethene	11	360	20
Toluene	5200	170000	2500
Trichloroethane, 1,1,2-	0.18	58	6.8
Trichloroethene	0.48	16	1.5
Trimethylbenzene, 1,2,4-	7.3	240	40
Vinyl chloride	0.17	5.6	0.17
m-Xylenes	100	3500	480
o-Xylenes	100	3500	660
p-Xylenes	100	3500	500
Xylenes	100	3500	660

Notes:

† USEPA VISL Calculator Version 3.4, June 2015 RSLs used to calculate target residential screening levels for indoor air, ambient air, sub-slab vapor and exterior soil gas concentrations based on the lower of either a target cancer risk of 1E-06 or a target hazard index of 1. Screening levels assumes 26 year exposure duration, 350 days per year, 24 hours per day.

* USEPA VISL Calculator Version 3.4, June 2015 RSLs used to calculate target residential screening levels for groundwater concentration based an average groundwater temperature of 20 degrees celsius and on the lower of either a target cancer risk of 1E-06 or a target hazard index of 1. Screening levels assumes 26 year exposure duration, 350 days per year, 24 hours per day.

$\mu\text{g}/\text{L}$ micrograms per liter

$\mu\text{g}/\text{m}^3$ micrograms per cubic meter

NL	No screening criteria calculated
RSL	Regional Screening Level
USEPA	United States Environmental Protection Agency
VISL	Vapor Intrusion Screening Level

Table 2. Summary of Exterior Soil Gas Analytical Results
Grenada Manufacturing Facility, Grenada, MS

DRAFT

Sample Details			Constituent ($\mu\text{g}/\text{m}^3$)															
Sample ID	Sample Date	Screened Interval (ft. bgs)	Benzene	Chloroform	1,2-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	Ethylbenzene	Methylene chloride	PCE	Toluene	1,1,2-TCA	TCE	1,2,4-TMB	Vinyl chloride	m,p-Xylenes	o-Xylenes
Exterior Soil Gas Screening Level *			12	4.1	3.6	7,000	NL	NL	37	3,400	360	170,000	58	16	240	5.6	3,500	3,500
SG-1	9/16/2015	5.5 - 6.0	< 4.0	< 6.0	< 5.0	< 4.9	< 4.9	< 4.9	7.6	< 43	< 8.4	< 4.7	< 6.8	< 6.7	< 6.1 UJ	< 3.2	15	< 5.4
SG-2	9/16/2015	5.5 - 6.0	5.6	< 5.6	< 4.6	< 4.5	< 4.5	< 4.5	< 4.9	< 40	< 7.7	< 4.3	< 6.2	< 6.1	< 5.6 UJ	< 2.9	< 5.0	< 5.0
SG-3	9/16/2015	5.5 - 6.0	9.4	9.1	< 4.7	< 4.6	< 4.6	< 4.6	< 5.1	< 41	< 7.9	< 4.4	< 6.4	< 6.3	< 5.8 UJ	< 3.0	< 5.1	< 5.1
SG-4	10/7/2015**	5.5 - 6.0	< 4.2	< 6.4	< 5.3	< 5.2	< 5.2	< 5.2	< 5.7	< 46	< 9.0	< 5.0	< 7.2	< 7.1	< 6.5	< 3.4	< 5.7	< 5.7
SG-5	9/16/2015	5.0 - 5.5	8.3 J [6.8 J]	88 J [88 J]	5.2 UJ [< 5.0 UJ]	5.1 UJ [< 4.9 UJ]	5.1 UJ [< 4.9 UJ]	5.1 UJ [< 4.9 UJ]	13 J [13 J]	< 45 UJ [< 43 UJ]	8.8 UJ [< 8.4 UJ]	30 J [30 J]	7.1 UJ [< 6.8 UJ]	7.0 UJ [< 6.7 UJ]	21 J [20 J]	3.3 UJ [< 3.2 UJ]	65 J [68 J]	24 J [25 J]
SG-6	9/16/2015	5.5 - 6.0	23 J	97 J	< 5.3 UJ	< 5.2 UJ	< 5.2 UJ	< 5.2 UJ	8.5 J	< 46 UJ	< 8.9 UJ	21 J	< 7.2 UJ	< 7.1 UJ	15 J	< 3.4 UJ	48 J	16 J
SG-7	10/7/2015**	2.75 - 3.25	< 4.3	17	< 7.3	< 5.3	< 5.3	< 5.3	< 5.8	< 47	< 9.1	< 5.1	< 7.3	< 7.2	14	< 3.4	13	8.1
SG-8	10/7/2015**	3.0 - 3.5	< 4.2	< 6.4	< 5.3	< 5.2	< 5.2	< 5.2	< 5.7	< 46	< 9.0	< 5.0	< 7.2	8.7	< 6.5	< 3.4	< 5.7	< 5.7

Notes:

* USEPA VISL Calculator Version 3.4, June 2015 RSLs used to calculate target residential screening levels for exterior soil gas concentrations based on the lower of either a target cancer risk of 1E-06 or a target hazard index of 1.0. Screening levels assumes 26 year exposure duration, 350 days per year, 24 hours per day.

** Due to a laboratory error the soil gas samples collected on 9/16/2015 were not analyzed. The soil gas port location was re-sampled on 10/7/2015.

[] Duplicate sample

BOLD Bold and shaded values exceed the applicable screening level based on the lower of either a target cancer risk of 1E-06 or a target hazard index of 1.0.
SHADED

$\mu\text{g}/\text{m}^3$ micrograms per cubic meter

bgs below ground surface

DCA Dichloroethane

DCE Dichloroethene

ft feet

HQ Hazard quotient

J The compound was positively identified; however, the associated numerical value is an estimated concentration only.

NL Screening level not calculated due to no toxicity data

PCE Tetrachloroethene

RSL Regional Screening Level

TCA Trichloroethane

TCE Trichloroethene

TMB Trimethylbenzene

UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.

USEPA United States Environmental Protection Agency

VISL Vapor Intrusion Screening Level